Abstract of the Disclosure

A motion estimation method is provided. In the method, respective mean difference values for a current search point within a search block and neighboring search points within the search block are calculated. Then, motion estimation is performed around the current search point if the mean difference value of the current search point is smaller than the mean difference values of the neighboring search points. On the other hand, motion estimation is performed based on the mean difference values of at least some of the neighboring search points if the mean difference value of the current search point is not smaller than the mean difference values of at least one the neighboring search points. The motion estimation method of the present invention does not deteriorate the quality of pictures during image compression in contrast to conventional motion estimation methods and enhances image compression speed by reducing remarkably computational complexity.